APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,719	09/05/2003	Stephen M. Kroon	D/ A3379	8793

25453	7590	07/18/2006	

PATENT DOCUMENTATION CENTER
XEROX CORPORATION
100 CLINTON AVE., SOUTH, XEROX SQUARE, 20TH FLOOR
ROCHESTER, NY 14644

EXAMINER
CASCHERA, ANTONIO A

ART UNIT	PAPER NUMBER
2628	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _08 May 2006_.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-5, 7 and 8_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-5, 7 and 8_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _05 September 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

1.   Claims 1-5, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kisor et

al. (EP 0683599A1).

In reference to claims 1, 3 and 8, Kisor et al. discloses a method and apparatus for

processing a dithered bi-level image to produce a compressed image (see column 1, lines 46-47).

Kisor et al. discloses first converting the bi-level image into a block pixel count data file that

specifies or lists the number of black pixels contained in blocks of pixels in the dithered bi-level

image (see column 4, lines 36-40). Note, the Office interprets the number of black pixels of

Kisor et al. equivalent to the "marked pixel count M" and the blocks of pixels of Kisor et al.

equivalent to the "plurality of N-pixel tiles" of Applicant's claims. Further, Kisor et al. explicitly

states that such block pixel processing is associated with image data taken from a photograph

using a scanner and then sent through a dithering process or image data which is, "pre-halftoned"

(see column 8, lines 9-22 and #60, 62 and 64 of Figure 2). Kisor et al. also discloses

decompressing the compressed block pixel count data file utilizing pattern sets which represent

the 256 different ways in which the human eye can perceive the shades of gray (see columns 10-

11, lines 43-34). Note, the Office interprets such patterns of Kisor et al. functionally equivalent

to the reference tiles since such patterns represent all possible regular viewing of gray colors by

the human eye. Kisor et al. further discloses matching a pattern with a block of pixels using the

block pixel count number and the same number of black pixels in the pattern (see column 11,

lines 35-55), more specifically selecting the correct block pixel pattern of the pattern sets having

the same or substantially the same numbers of black pixels defined by the numbers in the block

pixel count file (see column 6, lines 39-44). Note, the Office interprets that in order for Kisor et

al. to "select" the correct pixel pattern from the pattern sets, some sort of comparison or "test"

between the number of black pixels in the pixel pattern and block pixel count file is inherently

performed. Further note, even though Kisor et al. may state that the patterns are randomly

selected (see column 6, lines 39-40), it is further found that Kisor et al. explicitly discloses that

they are "randomly selected...in accordance with said numbers in said block pixel count file,"

(see column 6, lines 40-43). Also, in reference to claim 3, the photograph image used in

producing the dither bi-level image of Kisor et al. is seen as functionally equivalent to the,

"original data" of Applicant's claim 3. Further, Kisor et al. discloses the photograph image

being converted from a grey-scale image, or an image representing grey tones, into a dithered bi-

level image (see column 8, lines 16-26), such conversion from grey tones to dithered bi-level

values inherently comprising a, "pre-determined threshold value array" for judging which grey

tones should be set to black or white dots in the bi-level image.

In reference to claims 2 and 4, Kisor et al. discloses all of the claim limitations as applied

to claims 1 and 3 respectively above. Kisor et al. also discloses decompressing the compressed

block pixel count data file utilizing pattern sets which represent the 256 different ways in which

the human eye can perceive the shades of gray (see columns 10-11, lines 43-34). Note, the

Office interprets such patterns of Kisor et al. functionally equivalent to the reference tiles since

such patterns represent all possible regular viewing of gray colors by the human eye. Kisor et al.

further discloses matching a pattern with a block of pixels using the block pixel count number

and the same number of black pixels in the pattern (see column 11, lines 35-55), more

specifically selecting the correct block pixel pattern of the pattern sets having the same or

substantially the same numbers of black pixels defined by the numbers in the block pixel count

file (see column 6, lines 39-44). Note, the Office interprets that in order for Kisor et al. to

"select" the correct pixel pattern from the pattern sets, some sort of comparison or "test" between

the number of black pixels in the pixel pattern and block pixel count file is inherently performed.

Further note, even though Kisor et al. may state that the patterns are randomly selected (see

column 6, lines 39-40), it is further found that Kisor et al. explicitly discloses that they are

"randomly selected…in accordance with said numbers in said block pixel count file," (see

column 6, lines 40-43).

In reference to claims 5 and 7, Kisor et al. discloses all of the claim limitations as applied

to claim 3 above. Kisor et al. also discloses decompressing the compressed block pixel count

data file utilizing pattern sets which represent the 256 different ways in which the human eye can

perceive the shades of gray (see columns 10-11, lines 43-34). Note, the Office interprets such

patterns of Kisor et al. functionally equivalent to the reference tiles since such patterns represent

all possible regular viewing of gray colors by the human eye. Kisor et al. further discloses

matching a pattern with a block of pixels using the block pixel count number and the same

number of black pixels in the pattern (see column 11, lines 35-55), more specifically selecting

the correct block pixel pattern of the pattern sets having the same or substantially the same

numbers of black pixels defined by the numbers in the block pixel count file (see column 6, lines 39-44). Note, the Office interprets that in order for Kisor et al. to "select" the correct pixel pattern from the pattern sets, some sort of comparison or "test" between the number of black pixels in the pixel pattern and block pixel count file is inherently performed. Further note, even though Kisor et al. may state that the patterns are randomly selected (see column 6, lines 39-40), it is further found that Kisor et al. explicitly discloses that they are "randomly selected...in accordance with said numbers in said block pixel count file," (see column 6, lines 40-43). Kisor et al. also discloses that patterns are represented using grey levels indicated by the number of black pixels, the number of black pixels referring to the dithered bi-level image (see columns 10-11, lines 50-8). Kisor et al. also discloses for a 4x4 pixel block, there are 16 different patterns produced (see #110 of Figure 5).

Response to Arguments

2.   Applicant's arguments, see pages 5-9 of Applicant's Remarks, filed 11/14/05, with respect to the rejection(s) of claim(s) 1-5, 7 and 8 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781.

The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00

AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (571) 272-2600.

aac

7/10/06

KEE M. TUNG
SUPERVISORY PATENT EXAMINER